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# Degree of Manufacturer Readiness for Skill-Based Pay Programs

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## Abstract

The purpose of this study is to determine the degree of readiness of manufacturing companies in Black Hawk County, Iowa, to adopt a skill-based pay plan. Readiness, or change orientation, will be determined by comparing current characteristics of companies in this sample to those characteristics of American companies that have already implemented successful skill-based pay plans.

# DEGREE OF MANUFACTURER READINESS FOR SKILL-BASED PAY PROGRAMS

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## Introduction

Several companies in the Black Hawk County, Iowa, are currently considering changing their current compensation program to some type of skill-based pay program as a way to improve flexibility and productivity. In general, skill-based pay programs are individual based pay systems that compensate the individual based on the variety of jobs they can do, rather than the job they currently perform. Pay increases are associated with the certified addition or improvement of skills of the individual. (Gross, 1995; Anderson, 1994; Ledford, 1995) Companies considering this change are supported by the strong growth of this type of compensation plan.

> Increasingly, organizations are creating pay systems that reward employees for their skills and knowledge, rather than the jobs they hold. Between 1987 and 1993, the percentage of Fortune 1000 firms using some form of skill-based pay increased from 40% to 60%. (Ledford, Lawler, & Mohrman, 1995, p. 78)

Jenkins, Ledford, Gupta, and Doty (1992) found that companies that have implemented successful skill-based pay plans all have certain common types of organizational characteristics. This study supported earlier studies such as Lawler & Ledford (1985) which observed that some of these characteristics must accompany skill-based pay if an organization is to reap the full benefit of this type of compensation plan. Jenkins et al. also concluded that these characteristics must be taken into account in decisions about whether to use skill-based pay.

### Statement of the Problem

The purpose of this study is to determine the degree of readiness of manufacturing companies in Black Hawk County, Iowa, to adopt a skill-based pay plan. Readiness, or change orientation, will be determined by comparing current characteristics of companies

in this sample to those characteristics of American companies that have already implemented successful skill-based pay plans.

Significance of the Study

It is the intent of the researcher to use the information gathered to assess and assist companies, who wish to implement skill-based pay, in developing the characteristics that will assure success. Jenkins et al. (1992) noted that skill-based pay plans can and often do succeed, but only under the right circumstances. These circumstances are included as a part of the three basic sub-questions as addressed in the research questions section of this proposal and are measured by the survey instrument. If this research is successful, it will serve as the basis for future development of an assessment tool that can be used by technology transfer agents, private management consultants, and human resource professionals in the manufacturing field. The assessment can be used to determine the relative readiness of a company to adopt a skill-based pay program and the steps they need to take to improve their chances for implementing a successful program.

Delimitation's of the Study

This study will be delimited to only companies in Black Hawk County, Iowa, which have a standard industrial classification (SIC) code of between 2000 - 3900, which are commonly referred to as manufacturers . The study will also be delimited to include only direct labor employees whose pay is charged directly as a cost to the product or service.

Research Questions

Are manufacturers in Black Hawk County, Iowa, ready to implement a skill-based pay system? There are three basic sub-questions that will be used to determine whether a company has the characteristics to implement a successful skill-based pay program. (Jenkins et al., 1992) The definitions for the operational terms in "_" are explained in the following section. The three questions are:

1. Are their employees currently "well paid"?
2. Does the company currently have "high expenditures" for "employee training"?
3. Does the company show utilization of "employee empowerment," "alternative rewards," and "information sharing practices"?

Operational Definitions

Skill-based pay - A compensation strategy that is person-based, rather than job-based and pays employees for the repertoire of jobs they can perform, rather than for the specific job they may be doing at a particular time. Pay increases generally are associated with the addition and/or improvement of the skills of an individual employee, as opposed to better performance or seniority within the system (Jenkins et al., 1992).

Well paid - for the purposes of this study this term will refer to those manufacturing companies in Black Hawk County, Iowa, that currently report company average direct labor wages paid of more than $17.00 per hour. This figure represents the high end of the middle range for machine trade occupations in the county. (Iowa Department of Employment Services, 1996)

High expenditures - for the purposes of this study this phrase will refer to those manufacturing companies that report average dollars spent per employee, on training of over $466. (Gordon, 1996) This figure represents the average training dollars spent per employee in 1995 for companies surveyed in the U.S. with between 100-499 employees.

Employee training - for the purpose of this study expenses for employee training will include trainee wages paid for all types of training, wages for internal trainers if used, costs for outside seminars and class work including mileage and expenses, and off-the-shelf materials.

Employee empowerment practices - for the purpose of this study companies will be considered as using these practices if they show use of any of the following four means;

1. Survey Feedback - Systems that use employee attitude survey results, not simply as employee opinion polls, but rather as parts of a larger problem-solving process. Survey data are used to encourage, structure, and measure the effectiveness of employee participation.
2. Employee Participation Groups - Employee participation groups such as task teams, quality improvement teams, or employee work councils that meet to solve and implement controls for specific problems.
3. Self-Managing Work Teams - Also termed autonomous work groups, semi-autonomous work groups, self regulating work teams, or simply work teams. The work group (in some cases, acting without a supervisor) is responsible for a whole product or service, and makes decisions about task assignments and work methods. (Jenkins et al., 1992) The group may be responsible for its own

support services such as maintenance, purchasing, and quality control and may perform certain personnel functions such as hiring and firing team members and determining pay increases.

4. Job Enrichment or Redesign - Design of work intended to increase employee performance and job satisfaction by increasing skill variety, autonomy, significance and identity of the task, and performance feedback. (Jenkins et al., 1992)

Alternative rewards practices - for the purpose of this study companies will be considered as using these practices if they show use of any one of the following seven programs;

1. Non-Monetary Recognition Awards for Performance - Any non-monetary rewards (including gifts, publicity, dinners, etc.) for individual or group performance.
2. All- Salaried Pay Systems - Systems in which all employees are salaried, thus eliminating the distinction between hourly and salaried employees.
3. Cafeteria- Style Benefit Plans - Plans that give employees choices about the types and amounts of various fringe benefits they receive.
4. Employee Stock Ownership Plans (ESOP's) - Credit mechanisms that enable employees to buy their employer's stock, thus giving them ownership stake in the company; the stock is held in a trust until the employee quits or retires.
5. Profit Sharing Plans - Bonus plans that share some portion of company profits with employees.

6. Gainsharing Plans - Plans that share some portion of gains in productivity, quality, cost effectiveness, or other performance indicators with all employees in an organization in the form of bonuses. Employee suggestion committees are typically used. Gainsharing plans differ from profit sharing plans and employee stock ownership plans in that bonuses are based on some set of local performance measures, not company profits.
7. Work Group or Team Incentives or Bonus Systems - Systems in which bonuses or other financial rewards are tied to a short-term or long-term work group, permanent team, or temporary team performance.

Information sharing practices - for the purposes of this study companies will be considered as using these practices if they show use of any one of the following five means: Sharing information about the facility's operating results, unit's operating results, business plans and goals, new technologies that may affect employees, and competitor's performance.

Utilization of management practices - for the purposes of this study a company will be determined as utilizing the management practice if they score an average point value equivalent to frequently or higher for multiple choice questions or yes for yes/no questions. Companies answering never or seldom or no will not be considered as utilizing the practice.

# Review of Literature

## History

The skill-based pay system, also known as pay ladders, pay-for-knowledge, knowledge-based pay, competency-based pay, pay for skills, etc., are an outgrowth of the Quality of Work Life (QWL) programs that originated in Europe following the end of World War II (Henderson, 1989). The underlying philosophy of a QWL program is that if organizations grant employees significantly more authority over their workplace operations and then provide sufficient administrative and technical support, employee involvement will increase. Increased involvement will then lead to increased commitment and, with these kinds of positive emotional and intellectual interactions, performance and organizational productivity will improve (Henderson, 1989).

Since the beginning of the twentieth century manufacturing has shifted from an emphasis on physical skills, through a focus on mechanical skills, and into a time when technical and intellectual ability is extremely important. The end of labor intensive manufacturing shifts companies into providing their value through the knowledge and creativity they put into the product, rather than the muscle power. Fewer people, thinking better, helped by clever machines and computers, add more value than gangs or lines of unthinking human resources. The value these better thinking people add to an organization depends, of course, on their skills and knowledge. Therefore, compensation programs that reward the development of skills and knowledge have grown in popularity during the past decade (Flannery, 1996; Ledford et al., 1995; Anderson, 1994).

Skill-based vs. Traditional Pay

Skill-based pay is a system by which an employee is compensated for the tasks or number of skills he or she is capable of performing. In contrast to the traditional job based system in which compensation is determined by the task or job being performed and the time required (Anderson, 1994; Barrett, 1991). Skill-based pay programs encourage employees to acquire multiple skills.

> This can be beneficial for employers because, not only do these employees become more flexible resources, but they also develop a broader understanding of the work processes. This facilitates job-sharing and self-directed work teams, and the creation of career paths in the flattened hierarchy that will become increasingly characteristic of companies as we approach the next millennium (Gross, 1995, p.115).

Skill-based pay plans breakdown jobs into their components, or skill blocks, giving each component a dollar value based on what the company is willing to pay for an employee to have that skill.

> The skill-based pay philosophy also differs from traditional incentive programs by directly linking the acquisition and performance of relevant skills to compensation increases. Thus it is supportive of concepts that require substantial employee commitment, skill and teamwork such as just-in-time inventory and total quality management. (Anderson, 1994, p.3)

Current Users

Jenkins et al. (1992) conducted the largest study of current users of skill-based pay in the United States. They identified 182 qualified potential respondents by constructing a data base of companies based on professional and consulting contacts, review of available literature, and responses to concurrent ads placed in the American Compensation Associations monthly newsletter. These companies were mailed a packet of information containing information about the study and a lengthy survey. Using this method and

several follow-up mail and telephone contacts, they received completed surveys from 97 skill-based pay plans, representing a 53 % response rate. The researchers obtained information from company compensation managers, human resource directors and plant managers about industry and organizational characteristics of the companies using these plans, detailed characteristics of the plans, and information about the success of the plans.

Jenkins et al. (1992) finding's on industries and organizational characteristics included the following key points:

1. Organizations using skill-based pay are indistinguishable from other organizations in most respects. They include old and new, small and large, and union and non-union organizations.
2. Skill-based pay plans are more common in manufacturing companies than service industries. They are most common in companies using continuous process technologies, and they most often include only a portion of an organization's workforce, usually only direct labor and skilled trade employees.
3. Skill-based pay plan users tend to have flat organizational structures with few managerial layers.
4. Skill-based pay plans are embedded within a network of employee involvement practices. Skill-based pay locations make much heavier use of employee empowerment, alternative rewards, and information sharing practices.

Key findings on the characteristics of skill-based pay plans include;

1. Skill-based pay plans are relatively young and are preceded most often by traditional compensation systems.
2. They most often concentrate on production-related skill breadth and depth. The typical plan has 10 skill units, and the average learning time for a skill is 20 weeks.
3. Most plans include a process to assure that skill proficiency is retained over time and that supervisors, co-workers, and the employee (in this order) have a great deal of influence in the skill certification process.
4. More successful and less successful plans cannot be differentiated along specific design features; therefore the data provides no basis for universal design prescriptions. The success probably depends more on the context within which they are implemented and how the plans are tailored to local conditions.

Jenkins et al. (1992) reports that respondents enjoy many unique benefits of skill-based pay programs, ranging from greater employee motivation, flexibility, and versatility to higher productivity, lower labor costs, and lower turnover. The study did identify that skill-based pay plan users in the sample are different from most U.S. companies in three important ways:

1. They pay their employees unusually well.
2. They have unusually high expenditures for employee training.
3. They make heavy use of a variety of employee involvement practices which are less likely to flourish in traditional, hierarchical, bureaucratic organizations. (Jenkins et al., 1992)

Implementation

Several studies and publications (O'Neill & Lander, 1994; Hill, 1993; Dewey, 1994) have addressed the steps, elements, and problems in changing to skill-based pay. All identified four key elements of implementing a skill-based pay system consisting of (a) determining the skills needed by the company (b) designing and differentiating skill blocks (c) assessing and assigning employees to appropriate skill blocks (d) developing training to enable employees to progress through the various blocks.

Conclusion from the Literature

It appears that there has been much research on current users of skill-based pay and documentation on how to best go about implementing it. Research is lacking on companies that discontinued using skill-based pay and on the reasons why they were unsuccessful. It appears that one of the reasons for failure may lie in the characteristics of the company prior to starting skill-based pay.

> These characteristics distinguish successful skill-based pay users from others, and these characteristics must be taken into account in decisions about whether to use skill-based pay....skill-based pay plans can and often do succeed, but only under the right conditions. (Jenkins et al., 1992, p. 49)

Had these companies compared themselves to companies that had successful programs and identified characteristics that needed improvement prior to attempting to implement the program, they may have had a better chance for success. Therefore, it is the purpose of this study to assess companies using known characteristics of current skill-based pay users to determine areas which may need improvement prior to attempting to implement a skill-based pay program.

## Methods

To determine the readiness of manufacturing companies in Black Hawk County, Iowa, to adopt a skill-based pay plan a descriptive study was used. Each company in the sample was mailed a packet of materials, using Iowa State University's Center for Industrial Research and Service (CIRAS) stationary, including a cover letter containing information about the study (See Appendix II), a questionnaire (See Appendix III), and a postage paid return envelope. A request was made in the cover letter to respond within ten working days. Preprinted adhesive mailing labels were used to identify individual respondents. In case that respondents removed the mailing label from the survey, each return envelope was issued an individual survey number shown as a room number in the return address. Only one respondent removed the initial mailing label.

The survey was addressed to the company President, CEO, or Plant Manager. To encourage organizations to respond, they were given the opportunity to request a copy of the results of the study and a free consultation by a CIRAS representative to discuss implementation of a skill-based pay program. After fifteen days, a follow up survey was sent to companies who had not responded. Fifteen additional days after the follow up survey, telephone calls and faxes were made to maximize the number of respondents.

### Sample

Manufacturing companies were identified using the CIRAS (CIS) database. This database classifies manufacturers as companies that have standard industrial classification (SIC) codes from 2000 - 3900. A sort was completed by county to list all companies in Black Hawk County. This database identified 134 manufacturers in the Black Hawk

County. A table of random numbers was used to select 60 of these companies as the sample.

Instrument

The attached cover letter and questionnaire survey was used as the instruments to conduct the research. (See Appendix II & III) The instrument was first critiqued using a jury of 5 people consisting of faculty and senior members of the University of Northern Iowa, Iowa State University, and the Center for Industrial Research and Service. The jury was asked to judge the readability, completeness, clarity, ease of use of the instrument and appropriateness of the questions for the purposes of the study.

The results of this critique included breaking down one question that had several similar components, changing questions to a bold font while leaving definitions in a regular font to speed up the completion time, and changing several word choices to make the questions more precise.

Pilot

Using the revised instrument a pilot survey was conducted with 12 manufacturing companies in Butler and Bremer Counties in Iowa. A separate cover letter asking the pilot respondents to critique both the instrument cover letter and questionnaire was attached (See Appendix I). Besides being asked to highlight those areas that needed further explanation they were also asked several additional questions to determine the time to complete the survey, applicability of the survey and results, and appropriateness of question categories.

Five of the twelve companies or 42% responded to the pilot survey. The results showed that the survey took them 5 - 10 minutes to complete and that the categories

given for questions were appropriate. The instrument was given low marks for applicability to future compensation strategies and on its ability to assist them in developing these strategies. However, three of the five requested the results of the survey and one company requested a consultation to learn more about skill-based pay. As a result of these responses no changes were made in the survey. However, the cover letter was improved to better define and communicate skill-based pay and the purposes of the study.

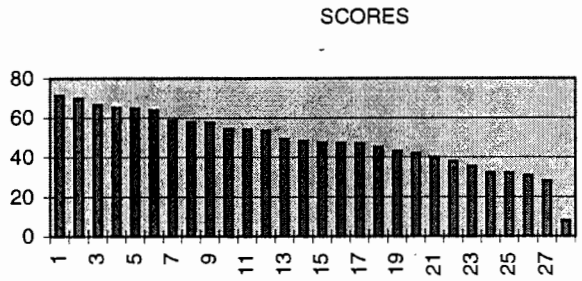
Analysis of Data

Since there was no data indicating the level of significance for any one of the five evaluation areas, 1) employee empowerment, 2) alternative rewards, 3)information sharing, 4) training dollars spent and 5) wages paid were all given the same scoring weight of 25 points. If the respondent used all of the practices, paid over $400.00 for employee training and paid over $17.01 in wages then they would receive the maximum score of 125 points. To test the accuracy of the responses each question was asked twice with the second question worded differently from the first. The only exception to this was in the employee involvement section where one question was broken down into three components and a question was asked about each component. The questionnaire was designed with 11 questions for the employee empowerment section, 10 for information sharing practices and 14 for alternative reward practices. There was one question each for pay and training dollars spent. The number of questions for each section was divided into 25 points to determine the point value for each question. On yes/no questions the full value of the question was given for the yes response, zero for the no response. On questions using the 1-5 scale, zero points were given for the 1 response and proportional

increasing values were given for the 2-4 responses up to the full value of the question for the 5 response. To tabulate, study and interpret the results a multi-page spreadsheet was used. The first page was a composite listing of all questions and point values of the responses given for all respondents. The following five pages of the spreadsheet were then given the titles of 1) employee empowerment, 2) alternative rewards, 3) information sharing, 4) training $'s, and 5) wages. Each page then had the results for all the questions asked in that category. Both responses for the two questions asked for each practice were grouped together and the average was used to determine the final point level.

## Results

Twenty eight manufacturers or 47% responded to the survey. Twenty (33%) requested to receive a copy of the survey results and five (8%) requested a consultation to learn more about skill-based pay. Overall results indicated that 21% or only 6 respondents scored more than 50% of the total points. The highest respondent scored 71.28 points or 57% of total points. The lowest respondent scored 7.9 points or only 6% of the total points. A graph of the final results is as follows;




The first sub-question of the study was "Are their employees currently well paid"? The results of the survey showing wages paid per hour for direct labor employee were;

| | |
|---|---|
| Less than $7.00 | 7% |
| $7.01 - 10.00 | 43% |
| $10.01 -12.00 | 39% |
| $12.01 -15.00 | 7% |
| $15.01 -17.00 | 4% |
| More than $17.00 | 0% |

Based on the operational definition for well paid which was greater than $17.00 per hour, the answer to the first sub-question is no, employees in Black Hawk county are currently not well paid. None of the respondents indicated paying their direct labor employees an average hourly wage of over $17.00 per hour. It has been shown (Jenkins et al., 1992)

that those companies that have implemented successful skill-based pay programs pay their employees unusually well.

The second sub-question was "Does the company currently have high expenditures for employee training"? The results of the survey showing training dollars spent per direct labor employee per year were;

| | |
|---|---|
| Less than $50. | 24% |
| $51. - 100. | 19% |
| $101. - 200. | 19% |
| $201. - 300. | 15% |
| $301. - 400. | 15% |
| More than $400 | 8% |

Based on the operational definitions for high expenditures and employee training the answer to the second sub-question is no, very few companies have high expenditures for employee training. Only 8% of the respondents indicated spending an average of over $400.00 per year on employee training of their direct labor employees. It has been shown (Jenkins et al., 1992) that those companies that have implemented successful skill-based pay programs have unusually high expenditures for employee training.

The third sub-question was "Does the company show utilization of employee empowerment, alternative rewards, and information sharing practices"? This sub-question has three basic components; employee empowerment, alternative rewards, and information sharing practices. A summary of the respondent data by groups showing utilization is as follows;

Employee Empowerment Practices;

| | Never | Seldom | Frequently | Mostly | Always |
|---|---|---|---|---|---|
| Survey Feedback | 32% | 36% | 25% | 0 | 7% |

| | Never | Seldom | Frequently | Mostly | Always |
|---|---|---|---|---|---|
| Employee Participation Groups | 14% | 50% | 32% | 0 | 4% |
| Self Managing Work Teams | 21% | 46% | 25% | 4% | 4% |
| Job Enrichment or Redesign | 7% | 54% | 36% | 3% | 0 |
| Alternative Rewards Practices; | | | | | |
| Non-Monetary Recognition Awards for Performance | 29% | 43% | 21% | 7% | 0 |

| | | | | |
|---|---|---|---|---|
| All Salaried Pay Systems | No | 100% | Yes | 0% |
| Cafeteria-Style Benefit Plans | No | 71% | Yes | 29% |
| Employee Stock Ownership Plans | No | 96% | Yes | 4% |
| Profit Sharing Plans | No | 54% | Yes | 46% |
| Gainsharing Plans | No | 89% | Yes | 11% |

| | Never | Seldom | Frequently | Mostly | Always |
|---|---|---|---|---|---|
| Work Group or Team Incentives or Bonus Systems | 46% | 36% | 7% | 11% | 0 |
| Information Sharing Practices; | | | | | |
| Facility's Operating Results | 18% | 32% | 21% | 21% | 8% |
| Unit's Operating Results | 25% | 32% | 36% | 4% | 3% |
| Business Plans and Goals | 11% | 32% | 46% | 11% | 0 |
| New Technologies Available | 8% | 29% | 36% | 25% | 2% |
| Competitor's Performance | 4% | 64% | 29% | 0 | 3% |

Based on the operational definitions for these three areas the answer to the third sub-question is also no. An average of only 25% of the companies indicated frequent or

higher use of the practices. It has been shown (Jenkins et al., 1992) that those companies that have implemented successful skill-based pay programs make heavy use of these practices.

## Conclusions

Based on the results of this study it can be concluded that the answer to the primary research question is no, manufacturers in Black Hawk county, Iowa are not ready to implement skill-based pay systems. Since all three of the three sub-questions have been answered "no" it is determined that the degree of readiness of manufacturers in Black Hawk county, Iowa is non-existent and that most companies have a long way to go before considering adopting this type of pay plan.

Based on the findings of this research companies scored lowest, and should consider addressing improvement efforts, in these areas ranked by scoring results from the survey:

1. Pay increases, including all salaried pay plans.
2. Employee stock ownership plans.
3. Spending more money on employee training.
4. Gainsharing plans.
5. Sharing facility's operating results.
6. Non-monetary recognition awards for performance.
7. Self managing work teams and using employee survey feedback.

## Recommendations for Further Action

Recommendations for further action are divided into two categories. Recommendations for manufacturing companies in Black Hawk county who want to get ready to implement a skill-based pay plan, and recommendations for CIRAS and/or other public or private consultants wishing to assist companies in developing skill-based pay programs. Each category will be addressed separately in the following paragraphs.

### Recommendations for Manufacturers

Manufacturing companies who wish to implement a skill-based pay program need to first assess their current business practices, using the results of this study as a guide. The more practices a company can utilize before implementing the program the less risk they will have in implementing an unsuccessful program. Companies should first evaluate their current level of employee pay and make adjustments were possible. It is often difficult and expensive to increase employee pay and increase the amount and value of employee training. However, many of the employee empowerment, alternative rewards, and information sharing practices are simple and cost very little to implement. They also have strong potential in increasing productivity and profitability which can then be used to fund employee pay increases and further training. For these reasons the researcher would recommend that companies start by looking at alternative rewards, information sharing practices, and employee empowerment practices first. Of these three practices the lowest scores were found in the utilization of alternative reward practices, specifically in all salaried pay plans, employee stock ownership plans, and gainsharing plans.

Recommendations for Consultants

For those wishing to assist companies in the development of skill-based pay program it is recommended that the consultant first assess, using the attached or similar instrument, the overall status of his/her client to determine readiness. To complete the assessment the consultant should not simply ask the questions of top management but should conduct a complete review by asking, and comparing the responses to, the questions at all levels in the company including compensation managers, human resource directors, plant and/or production managers, supervisors, and direct labor employees. Those which are considered "most ready" are the clients which have the highest readiness of implementing a successful program.

For those clients that are "not ready" it is recommended that the consultant first inform the client of the limited success they may experience starting this type of program without first developing some of these key characteristics. The consultants initial emphasis should be directed at helping the company to develop some of these characteristics first before considering a skill-based pay program.

## References

Anderson, L. E. (1994, Spring). Productivity gains driving interest in skill-based pay systems. C.I.R.A.S. News, 29, 3-4

Barrett, G. V. (1991). Comparison of skill-based pay with traditional job evaluation techniques. Human Resource Management Review, 1, 97-105

Dewey, B. J. (1994, January/February). Changing to skill-based pay: Disarming the transition landmines. Compensation & Benefits Review, 26, 38-43

Flannery, T. P. (1996). People, Performance, & Pay. New York, NY: The Free Press.

Gordon, J. (1996, October). Industry report 1996. Training, 33, 36-39

Gross, S. E. (1995). Compensation for Teams. New York, NY: AMACOM

Henderson, R. I. (1989) Compensation Management: Rewarding Performance. Englewood Cliffs, NJ: Prentice Hall.

Hill, R. B. (1993, September/October). How to design a pay-for-skills-used program. Journal of Compensation and Benefits, 9, 32-38

Iowa Department of Employment Services. (1996, February). Cedar Valley Wage and Benefits Survey. Des Moines, IA: Author.

Jenkins, G. D., Ledford, G. E., Gupta, N., & Doty, H. D. (1992). Skill-Based Pay; Practices, Payoffs, Pitfalls and Prescriptions. Scottsdale, AZ: American Compensation Association.

Lawler, E. E., & Ledford, G. E. (1985, September). Skill-based pay: A concept that's catching on. Personnel, 62, 30-37

Ledford, G. E. (1995, July/August). Paying for the skills, knowledge, and competencies of knowledge workers. Compensation & Benefits Review, 27, 55-62

Ledford, G. E., Lawler, E. E., & Mohrman, S. M. (1995, July/August). Reward Innovations in Fortune 1000 Companies. Compensation & Benefits Review, 27, 76-80

O'Neill, G. L., & Lander, D. (1993/1994, Winter). Linking employee skills to pay: A framework for skill-based pay plans. American Compensation Association Journal, 6, 14-27

Appendix I
Pilot Cover Letter

Dear xxxxxxxxxxxxx,

I need your help! I am a graduate student in Industrial Technology at the University of Northern Iowa and currently work for the Center for Industrial Research and Service (CIRAS) at Iowa State University. I am researching a productivity improvement method called skill-based-pay. It has been shown to be extremely effective in increasing productivity and is being used by a growing number of U.S. companies. I am trying to develop an assessment tool to determine if and when a company is ready to implement skill-based-pay.

I have developed the attached questionnaire and would like you to complete it and give me feedback on how to improve it. As you take the survey please highlight those areas that you did not understand or feel further explanation is needed. **I would like you to write any comments or questions on the questionnaire.** After you have completed the survey please return them to me in the enclosed envelope. All results and comments will be kept strictly confidential. **Please respond within 10 working days**. If you are interested in receiving a copy of the survey results or would like further consultation on adopting a skill-based-pay plan please check the appropriate boxes at the end of the survey.

Thank you for your help!

1. How long did it take you to complete the survey?
   Less than 5 minutes _____ 10 -15 minutes _____
   5 - 10 minutes _____ over 15 minutes _____

2. On a scale of 1 - 5, how applicable would the results of this survey be to your concerns for future compensation strategies?

   Not applicable 1 2 3 4 5 applicable

3. On a scale of 1-5, do you believe you can use the results of this survey to assist you with developing future compensation strategies?

   Useful 1 2 3 4 5 not useful

4. Were the categories given for questions appropriate? Yes _____ No _____

Sincerely,
Mike Willett

Appendix II
Cover Letter

Dear xxxxxxxxxxxx,

Have you ever considered changing your existing employee pay plan to some type of, or a better type of, incentive plan to improve productivity? If you have you are not alone. One of the problems in trying to answer this question is that different pay plans are designed to be most successful in companies with certain organizational characteristics. Since little is understood about what type of plans fit what organizational characteristics it is difficult to decide which plan will work best for you and your company.

We do know that the fastest growing and most successful type of employee compensation plans are skill-based pay plans. They, like their predecessors, are most successful in companies that have certain organizational characteristics. Because of its success over 60% of the *Fortune* 1000 companies are currently using some type of skill-based pay program. These are big companies, however the characteristics that make a skill-based pay program successful have little to do with number of employees or annual sales.

For 34 years CIRAS's mission has been to make its manufacturing clients more competitive and successful. Skill-based pay programs have accomplished these objectives in a growing number of U. S. companies. The question is "Do manufacturers in Black Hawk County have the characteristics to be successful with a skill-based pay program?"

To determine the readiness of companies in the Black Hawk County area of adopting a skill-based pay plan, we have constructed a survey to measure those organizational characteristics that contribute to the success of this type of compensation plan. We will use the results to better understand our manufacturing clients and to more effectively help our clients when they request our assistance.

Please take a few minutes to complete the attached survey. All results will be kept strictly confidential and data will be grouped so that no individual company will be identified. **Please respond within ten working days.** All respondents to the survey that have further interest in developing a skill-based pay program will receive a free consultation by a CIRAS representative. If you would be interested in receiving the results of this survey, or would like to take advantage of the free consultation, please check the appropriate box at the end of the survey. Thank you for your assistance.

Sincerely,

Michael R. Willett
Manufacturing Specialist
Center for Industrial Research and Service

# Appendix III
# Questionnaire

| | | Never | Seldom | Frequently | Mostly | Always |
|---|---|---|---|---|---|---|
| 1 | **Do you use employee survey feedback of direct labor employees to solve problems?** | 1 | 2 | 3 | 4 | 5 |
| 2 | **Do you use employee survey feedback of direct labor employees to encourage, structure, and measure the effectiveness of employee participation?** | 1 | 2 | 3 | 4 | 5 |
| 3 | **Do you utilize employee teams consisting of some direct labor employees to solve problems?** | 1 | 2 | 3 | 4 | 5 |
| 4 | **Do you use self-managing work teams consisting of direct labor employees?** (A work group, with/without a supervisor, that makes decisions about task assignments and work methods and may include maintenance, purchasing, Q.C., and personnel functions.) | 1 | 2 | 3 | 4 | 5 |
| 5 | **Do you ever redesign direct labor employee tasks to increase the skill variety required to do the job?** | 1 | 2 | 3 | 4 | 5 |
| 6 | **Do you give out any non-monetary rewards to direct labor employees (including gifts, publicity, dinners, etc.) for individual or group performance?** | 1 | 2 | 3 | 4 | 5 |
| 7 | **Are all your direct labor employees on salary?** | Yes _____ | | No _____ | | |
| 8 | **Do you have a benefit plan for direct labor employees that gives choices about the types and amounts of benefits they receive?** | Yes _____ | | No _____ | | |
| 9 | **Do you have an employee stock ownership plan in which direct labor employees can participate?** (Plans that enable employees to buy employer's stock, thus giving them ownership in the company; the stock is held in a trust until employees quit or retire.) | Yes _____ | | No _____ | | |

10 **Do you have a profit sharing plan for direct labor employees?** (Bonus plans that share some portion of company profits with employees.) Yes _____ No _____

11 **Do you have a gainsharing plan for direct labor employees?** (Plans that share a portion of gains in productivity, quality, cost, or other performance indicators, besides company profits, with all employees in an organization in the form of bonuses.) Yes _____ No _____

| | Never | Seldom | Frequently | Mostly | Always |
|---|---|---|---|---|---|
| 12 **Do you have bonuses or other financial rewards tied to work groups or team performance consisting of direct labor employees?** | 1 | 2 | 3 | 4 | 5 |
| 13 **Have you ever redesigned a direct labor employee job to increase performance feedback to the employee?** | 1 | 2 | 3 | 4 | 5 |
| 14 **Are direct labor employees kept informed as to the companies overall operating results?** | 1 | 2 | 3 | 4 | 5 |
| 15 **Are direct labor employees kept informed as to their department's operating results?** | 1 | 2 | 3 | 4 | 5 |
| 16 **Do direct labor employees know what the companies future plans and goals are?** | 1 | 2 | 3 | 4 | 5 |
| 17 **Does your company keep direct labor employees informed about new technologies that may effect their job?** | 1 | 2 | 3 | 4 | 5 |
| 18 **Are direct labor employees kept informed by the company on the performance of competitors?** | 1 | 2 | 3 | 4 | 5 |
| 19 **Do you use employee attitude surveys of direct labor employees for more than just getting opinions?** | 1 | 2 | 3 | 4 | 5 |
| 20 **Do you have problem solving teams consisting of at least some direct labor employees that have the authority to implement the solutions they develop?** | 1 | 2 | 3 | 4 | 5 |

| | | Never | Seldom | Frequently | Mostly | Always |
|---|---|---|---|---|---|---|
| 21 | Do you have work groups within the company consisting of at least some direct labor employees that make decisions about task assignments and/or work methods for the group? | 1 | 2 | 3 | 4 | 5 |
| 22 | Have you ever changed a boring direct labor job to make it more exciting, meaningful and challenging? | 1 | 2 | 3 | 4 | 5 |
| 23 | Have you ever rewarded a direct labor employee for performance with anything besides money or praise? | 1 | 2 | 3 | 4 | 5 |
| 24 | Are all employees paid a predetermined amount each pay period without regard to the number of hours worked? | Yes _____ | | No _____ | | |
| 25 | Can a direct labor employee choose to have a different benefit package in terms of types and amounts of benefits than someone else in the company? | Yes _____ | | No _____ | | |
| 26 | Do you have any direct labor employees who own stock in the company? | Yes _____ | | No _____ | | |
| | | Never | Seldom | Frequently | Mostly | Always |
| 27 | Can a direct labor employee receive some portion of company profits? | 1 | 2 | 3 | 4 | 5 |
| 28 | If a direct labor employee had outstanding performance during a period that the company lost money would they still receive a bonus over and above a normal pay increase? | 1 | 2 | 3 | 4 | 5 |
| 29 | Can a direct labor employee receive a bonus or financial reward for being a part of a successful team? | 1 | 2 | 3 | 4 | 5 |
| 30 | Would a direct labor employee in your plant know whether or not the company made or lost money in the last quarter of the year? | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 31 | **Would a direct labor employee in one department know if his department performed better or worse than another department?** | 1 | 2 | 3 | 4 | 5 |

| | | Never | Seldom | Frequently | Mostly | Always |
|---|---|---|---|---|---|---|
| 32 | **If a direct labor employee was asked what the future plans and goals of the company where, would they be the same as yours?** | 1 | 2 | 3 | 4 | 5 |
| 33 | **Are periodicals that show new technologies made available to direct labor employees?** | 1 | 2 | 3 | 4 | 5 |
| 34 | **If a direct labor employee was asked how your company was doing as compared to a particular competitor, would they give the same answer as you?** | 1 | 2 | 3 | 4 | 5 |
| 35 | **Do you ever redesign direct labor employee tasks to decrease the need for supervision?** | 1 | 2 | 3 | 4 | 5 |

36 **How much do you spend on average per year per direct labor employee on training?** (Includes trainee wages paid, wages for internal trainers, costs for outside seminars and class work including mileage and expenses, and off-the -shelf materials.)

**< $50. ____ $51. - 100. ____**
**$101. - 200. ____ $201. - 300. ____**
**$301. - 400. ____ > $401. ____**

37 **What is the average dollar per hour wage you pay for direct labor employees?**

**< $7. ____ $7.01 - 10. ____**
**$10.01 - 12. ____ $12.01 - 15. ____**
**$15.01 - 17. ____ > $17.01 ____**

**_____ Yes, I would like a copy of the survey results.**

**_____ Yes, I would like a free consultation to learn more about skill-based pay.**